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**Exploring the contributions of using Quizizz as a strategy to complement
intentional vocabulary learning among rural school 6th graders.**

Tesis para optar al grado de Magíster en innovación en la enseñanza, aprendizaje
y evaluación del Inglés

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Abstract

The use of technology inside the classroom comes with several benefits for both students and the teacher. It allows students to be part of a fruitful process in which they can strengthen their knowledge, especially when it comes to vocabulary, which is the area generating problems. The aim of this research is to explore the contribution of using Quizizz as a strategy to complement intentional vocabulary learning among 6th graders from a rural school in Chile. Quizizz is a software developed for educational purposes. Among its many characteristics, the ones that are relevant for this research are its capacity to incorporate gamification features inside the classroom. In addition, it allows vocabulary to work in its three dimensions: meaning, form, and use. This research aims to explore the contributions of using this kind of technology in the classroom through the process of action research. A vocabulary knowledge test was used as a pre and post intervention test to compare the results and determine whether there is an improvement or not. Additionally, a focus group interview and an open-ended interview were used to analyze participants' perceptions towards the activities. Findings show that there was an improvement in terms of vocabulary knowledge, especially in the dimension of meaning and form. Additionally, Participants' positive perceptions towards the app affirm the belief that integrating gamified activities into the classroom is advantageous for both students and teachers.

Key words: intentional vocabulary learning, vocabulary knowledge, gamification, Quizizz.

Resumen

El uso de la tecnología dentro del aula conlleva varios beneficios tanto para los estudiantes como para el profesor. Permite que los estudiantes sean parte de un proceso fructífero en el que puedan fortalecer sus conocimientos, especialmente en lo que respecta al vocabulario, que es el área que genera problemas. El objetivo de esta investigación es explorar la contribución del uso de Quizizz como estrategia para complementar el aprendizaje intencional de vocabulario en estudiantes de 6° grado de una escuela rural de Chile. Quizizz es un software desarrollado con fines educativos. Entre sus múltiples características, la que resulta relevante para esta investigación es su capacidad para incorporar funciones de gamificación dentro del aula. Además, permite trabajar el vocabulario en sus tres dimensiones: significado, forma y uso. Esta investigación tiene como objetivo explorar las contribuciones del uso de este tipo de tecnología en el aula a través del proceso de investigación-acción. Se utilizó una prueba de conocimiento de vocabulario como prueba pre y post intervención para comparar los resultados y determinar si hay mejora o no. Además, se utilizó una entrevista de grupo focal y una entrevista abierta para analizar las percepciones de los participantes hacia las actividades. Los hallazgos muestran que hubo una mejora en términos de conocimiento del vocabulario, especialmente en la dimensión de significado y forma. Además, las percepciones positivas de los participantes hacia la aplicación afirman la creencia de que integrar actividades gamificadas en el aula es ventajoso tanto para los estudiantes como para los profesores.

Palabras clave: aprendizaje intencional de vocabulario, conocimiento de vocabulario, gamificación, Quizizz.

Chapter I: Introduction

1.1 Problem statement

Vocabulary has proven to be a crucial part of English language learning since it is directly related with almost every possible branch of the language. Without an adequate vocabulary range, it is difficult to communicate, express ideas or be understood properly (Ahmad, 2012). Overall, having a strong vocabulary is important for effective communication and for fully participating in the social and cultural life of a community that speaks English. It is also a key factor in being able to learn and succeed in academic and professional settings, where a high level of language proficiency is often required.

Being of such a transversal nature is the reason that captivated the attention of researchers in the field who agreed that instead of using incidental vocabulary learning, one of the best ways to go is using intentional vocabulary learning (Pellicer-Sánchez, 2015). This is the area from which students benefit the most. In other words, English language learners benefit in rich ways from activities in which the use of vocabulary is the protagonist, rather than the ones in which it is embedded. These intentional vocabulary learning activities refer to the use of apps, video games, songs, role play, or any other “real life” activity in which the use of vocabulary is focused.

However, my reality differs from the ideal situation. This research takes place in a rural school with high levels of vulnerability. In this place, mainly primary school students showed a considerable lack of vocabulary which led to problems in terms of communication and understanding. I presume this might be due to the approach currently used at the school to address this part of the language. When it comes to vocabulary, students are familiar with traditional and old-fashioned activities (Dictionary based tasks, word maps, word lists), which prompts students to memorize words for a test only to subsequently forget them afterward.

As it was stated earlier, intentional vocabulary learning refers to learning that occurs with the specific intention of acquiring new vocabulary knowledge (Pellicer-Sánchez, 2015). Thus, a possible solution to the issue presented would be under the umbrella of gamification. This expression is a widely used word nowadays. It can be defined as using game-based mechanics, aesthetics, and game thinking to engage people, motivate action, promote learning, and solve problems (Kapp, 2012). Therefore, the proposal of this action research is to use the principle of gamification through Quizizz as a strategy to complement or foster intentional vocabulary learning. Thus, the research question guiding this investigation is: What are the contributions of using

Quizizz as a strategy to complement intentional vocabulary learning among 6th graders?

1.2 General objective and specific objectives

The general objective for this research is to explore the contributions of using Quizizz as a strategy to complement intentional vocabulary learning among rural school 6th graders.

The specific objectives are:

1. To assess students' vocabulary knowledge before and after the intervention.
2. To describe participants' perceptions of Quizizz as a strategy to complement intentional vocabulary learning.
3. To describe a fellow research practitioner's perception of Quizizz as a strategy to complement intentional vocabulary learning.

Chapter II: Theoretical framework

In this section, ideas concerning the subject of this research are displayed in detail to have a clear understanding of all the concepts involved. There are five major themes that work as an outline for this part of the research: Vocabulary learning, promoting vocabulary learning, gamification, Quizizz and a three-dimensional framework.

2.1 Vocabulary learning

It is necessary to discuss and to analyze different approaches when it comes to vocabulary learning. For example, in this case it is relevant to clarify some ideas regarding specific terminology. As it is the situation involving learning and acquisition, also the importance and relevance of vocabulary knowledge when learning the English language.

2.1.1 Learning and acquisition

When talking about language, these two concepts are usually treated as equals or synonyms. Nonetheless, based on research, there is a difference between these words. A good way to picture this difference is using the L1 and the L2 as a reference. People acquire their L1 from input and being exposed to the language from a very early age. In addition, acquiring the L1 is understood as an unconscious process. On the other hand, people learn their L2 consciously, with proper instruction and usually at an older age (Nor, 2018).

Krashen (1989), one of the most well-known innatists, tried to differentiate between L1 acquisition and L2 learning because he thinks there are two approaches to gain linguistic proficiency. First, language acquisition mirrors the way children naturally develop their first language (L1) skills, occurring unconsciously akin to the process of language learning. Since language learners are frequently unaware that they are learning a language, they develop acquired competence, which is characterized by a general "feel" for correctness and the recognition of when sentences "sound right" or "feel right" despite ignorance of the exact grammatical rules. According to his theory, language learners are only aware of the language they are using when communicating. The second method is through language learning, when L2 is intentionally learned. The L2 learners acquire the rules of the language, are familiar with them, and can discuss them. It is highly relevant to understand and differentiate these two concepts to have a better understanding of the research and the process followed to design the intervention, which aligns with the principles of learning a second language.

Akabogu (2013) defined these two concepts as follows, second language acquisition (SLA) refers to the naturalistic process of internalizing a language through exposure and interaction, leading to implicit knowledge of the language, while second language learning (SLL) involves the conscious process of accumulating explicit knowledge of the language through formal instruction and study.

Finally, Rahayu and Ramadhan (2021) suggested that language acquisition refers to the natural, subconscious process of internalizing a language, typically occurring during childhood, and leading to native-like proficiency. On the other hand, language learning involves a conscious effort to study and understand a language, often through formal instruction, and may result in varying degrees of proficiency (Lyngsnes, 2013). The distinction between the two processes is crucial, as it impacts the methods and strategies employed in language education.

As a conclusion, it is possible to observe how different authors coincide in how they differentiate these two concepts. This leads to a clear distinction where language acquisition is related with the natural process of getting proficient at a certain language, just like people do when acquiring their first language or mother tongue. Lastly, language learning is related to the conscious effort to learn a language. This process is often associated with formal instruction.

2.1.2 The importance of vocabulary

It has been widely agreed that when it comes to learning English as a foreign language (EFL) vocabulary plays a key role, especially knowing that a higher level of vocabulary is directly related with a higher level of proficiency and accuracy in the

language. Ahmad (2012) states “word power facilitates fluent speaking and effective writing. It substantiates both: learners’ acquisition of knowledge and production of knowledge. It enriches learners’ integrated language skills such as listening, speaking, reading, and writing.” (p. 71)

In terms of reading and listening, it has been concluded by Nation (2006) that “If we take 98% as the ideal coverage, an 8,000–9,000 word-family vocabulary is needed for dealing with written text, and 6,000–7,000 families for dealing with spoken text.” (p. 60)

Regarding reading in isolation, a strong vocabulary body enables learners to comprehend written texts more effectively. Burgoyne et al. (2009) found that children learning English as an additional language often have lower levels of English vocabulary knowledge, which can hinder their ability to understand written text. Rich vocabulary allows learners to grasp the meaning of words and phrases in context, facilitating reading comprehension.

Moving into listening, vocabulary knowledge allows learners to recognize and comprehend words and phrases in spoken discourse, enabling them to follow conversations, lectures, and audio materials more effectively. Additionally, robust vocabulary helps learners to infer meaning from context and make connections between spoken words and their corresponding written forms (Hurtado et al., 2008).

When it comes to writing, it has been said that formulation, or turning nonverbal information (such as propositional content, audience awareness, or rhetorical purposes) into verbal information, is the fundamental writing process. This approach strongly utilizes a writer’s language capabilities. The linguistic tools required will vary depending on the specifications of the writing task, but broad vocabulary and a varied and extensive toolkit of sentence structures will always aid the writer in being clear and succinct (Schoonen, 2011) In addition, the use of appropriate and varied vocabulary enables learners to convey their ideas effectively and create more engaging written pieces. Vocabulary knowledge also contributes to the development of sentence structure and coherence in writing (Tayyebi, 2021).

Related to speaking, it is possible to mention that vocabulary plays a fundamental role in developing this productive skill. Taslim (2019) argues that based on the calculation of the relationship between student vocabulary mastery and speaking ability, it was determined that in the sample class of said work, the students’ vocabulary mastery (variable X) contributed approximately 75.33% of the speaking ability (variable Y), while 25.66% was influenced by other factors. On the same line, Esa (2021) mentions that a wide range of vocabulary allows learners to express themselves fluently and accurately in spoken language. It enables learners to

choose the right words and phrases to convey their intended meaning, enhancing their communicative competence. Vocabulary knowledge also supports learners in understanding and participating in conversations, discussions, and presentations.

In conclusion, vocabulary is a fundamental component of learning English and has a significant impact on the four language skills: reading, writing, listening, and speaking. Strong vocabulary enhances reading comprehension, improves writing skills, aids in understanding spoken language, and facilitates effective communication. Therefore, it is crucial for learners to develop and expand their vocabulary knowledge to achieve proficiency in English.

2.2 Promoting vocabulary learning

Research on the area indicates that there are several approaches that could have positive repercussions in our students' vocabulary knowledge. Nonetheless, this section aims to describe the ones that are closer to this research's methodology.

2.2.1 Intentional and incidental vocabulary learning

In terms of vocabulary learning, researchers have agreed to separate two different views. First, Intentional vocabulary learning, which is work based on the traditional methods such as synonyms, antonyms, word substitution, multiple choice, scrambled words, and crossword puzzles (Ahmad, 2012). Second, incidental vocabulary learning, which is very similar in definition to the idea of acquisition. It can be defined as unintentionally taking up language, patterns, or spelling through conversation, communicative activities, or reading for enjoyment or substance, for instance. Learning something while attempting to learn something else (Richards & Schmidt, 2002). A good example of incidental vocabulary learning is when students state they learn some words through listening to a song or playing a video game.

Even though both views (intentional and incidental) have shown good results. This action research is focused on intentional vocabulary learning. Research indicates that profits made through intentional vocabulary learning activities appear to be very large on immediate posttests but possibly much smaller on delayed posttests (e.g., Nation, 2013; Schmitt, 2000, 2008). Moreover, Webb (2020) indicates that different activities have different educational value. Writing and fill-in-the-blank exercises produce relatively small advances in understanding of the relationship between form and meaning, but flashcards and word lists produce quite big gains.

Research has consistently shown the benefits of intentional vocabulary learning. Intentional learning refers to learning that occurs with the specific intention of acquiring new vocabulary knowledge (Pellicer-Sánchez, 2015). Several studies

have compared intentional learning to incidental learning, which refers to learning that occurs because of using language without a specific intention to learn new words (Webb et al., 2020). These studies have consistently found that intentional learning leads to greater vocabulary gains compared to incidental learning (Webb et al., 2020; Sinyashina, 2020).

One study by Pellicer-Sánchez (2015) compared intentional and incidental vocabulary learning and found that intentional learning through explicit teaching was more effective in expanding learners' lexical knowledge. Another meta-analysis by Webb et al. (2020) also supported the efficacy of intentional approaches to vocabulary learning, showing that intentional learning activities led to greater and faster gains in vocabulary knowledge compared to incidental learning.

Intentional vocabulary learning is particularly beneficial for learners in the early stages of vocabulary acquisition and for lower proficiency learners (Muqaibal et al., 2023). These learners may have limited existing vocabulary knowledge and are less likely to be able to infer the meaning of unknown words incidentally (Muqaibal et al., 2023). Intentional learning activities provide explicit instruction and practice of unknown words, facilitating the rapid development of lexical knowledge (Muqaibal et al., 2023).

Furthermore, intentional vocabulary learning has been found to be more effective than incidental learning in various contexts, including watching captioned videos (Sinyashina, 2020), computer-assisted language learning (Muqaibal et al., 2023), and integrating incidental and intentional learning in language classrooms (Emam, 2020). These studies consistently support the advantages of intentional vocabulary learning in terms of faster and more robust learning outcomes.

It is important to note that intentional and incidental learning approaches have different advantages and disadvantages, and the division between them is not always clear-cut (Zhang & Graham, 2019). However, research consistently demonstrates the benefits of intentional vocabulary learning in terms of vocabulary gains, retention, and reaching productive levels of mastery (Webb et al., 2020; Muqaibal et al., 2023).

In conclusion, research consistently supports the benefits of intentional vocabulary learning over incidental learning. Intentional learning approaches, which involve explicit instruction and practice of new words, lead to greater and faster gains in vocabulary knowledge compared to incidental learning. These findings have important implications for language teaching and learning, highlighting the importance of incorporating intentional vocabulary learning activities in language

classrooms. As a matter of fact, after reading research on the field, the decision of following the intentional vocabulary learning path was made.

2.2.2 CALL

Richards and Schmidt (2002) define CALL (computer assisted language learning) as the practice of teaching or studying a second or foreign language using a computer. CALL might appear as:

- a. activities that use the computer's features while parallel learning through other media (such as utilizing the computer to show a reading text)
- b. activities that are extensions or modifications of print-based or classroom-based activities (for instance, software that teaches writing skills by assisting students in coming up with topics and thesis statements and editing essays for vocabulary, grammar, and subject development)
- c. activities which are exclusive to CALL (e.g. virtual language exchange: This is an activity that allows learners to communicate with native speakers of the language they are learning in real-time, either through text-based chat or video conferencing).

Researchers in the field have studied the contribution of CALL activities in vocabulary acquisition. Lin, (2010) concluded that the video-based CALL program facilitates vocabulary incidental acquisition of students with different English proficiency abilities. On the same path, Zapata and Sagarra (2007) stated that combining in-person instruction with a paper or online workbook makes it easier to learn L2 vocabulary. After two and four months of instruction, L2 learners who use a paper workbook, or an online workbook can perform equally well. However, after six and eight months of exposure to the learning environment, students who complete their weekly homework using an online workbook outperform those who use a paper workbook.

2.2.3 MALL

Mobile assisted language learning or mobile learning can be defined as cross-location learning or learning that makes use of opportunities provided by portable technologies. M-learning encompasses the use of mobile devices in the classroom to promote student group cooperation, as well as the use of handheld computers, portable dictionaries, and other portable devices for language acquisition (Richards & Schmidt 2002).

Just like the previous approach (CALL), MALL has captured the attention of research on the field. Fageeh (2013) stated that language experts and educators have asserted that certain components of language learning, such as vocabulary, may be mediated by digital instruments like linked mobile devices considering this technological boom. Researchers and educators need to investigate fresh, technologically advanced methods of vocabulary teaching considering the widespread emphasis on the development of 21st century abilities.

Vocabulary is one of the main research topics affected by technology, Fageeh (2013) concluded that most students become more motivated and engaged when smart phone technology is included into vocabulary lessons, and motivation and engagement are further improved when students have linked mobile devices. Modern students are accustomed to carrying out most of their everyday duties using smart gadgets that are connected to the internet. Quizlet is a perfect learning environment that may promote active learning both inside and outside of the classroom (Sanosi, 2018).

2.2.4 Student response system

Student response systems (SRS) or “clickers” can be understood as “a wireless response system that provides faculty the means to actively engage students in lecture classes.” (Kaleta, 2007, p. 2). To provide a better understanding on this area, research on the field (Duncan, 2005) indicates that SRS works in such a way that every student has a transmitter (clicker), which resembles a little remote control for a television in many ways. The clicker features several buttons with labels like “a,” “b,” “c,” “d,” and “e.” One or more receivers in the classroom pick up the signals sent when a student presses one of the buttons, and a computer with the necessary software is set up to record each student's reaction. It is important to mention that from one SRP to another you might find some differences, but most of them share the same principal idea just as described before. It is just as important to mention that nowadays SRP or clickers might appear in the shape of a laptop and cell phones and not just specific equipment designed for that purpose.

Investigators who have carried out interventions using these kinds of systems indicate a considerable number of advantages of using SRS. Wang (2015) claimed the outcomes were overwhelmingly favorable. However, if the same SRS is used repeatedly in several classes, we may anticipate that the wear off effect would be a bigger issue. Making sure that the SRS can offer a wide variety of games and game modes to keep the gameplay interesting and give the students variety is the greatest remedy for this issue.

2.3 Gamification

Gamification is a concept that nowadays has taken important relevance in terms of education. Many educators have implemented this strategy since the early 2000's. Kapp (2012) defined it as using game-based mechanics, aesthetics, and game thinking to engage people, motivate action, promote learning, and solve problems.

Nah, (2014) proposed a list of steps which should be considered when implementing gamification activities in the classroom.

1. Determination of learners' characteristics: to know if new tools and techniques will be appropriate when teachers introduce new learning strategies, it is crucial to describe students' characteristics (profiles).

2. Definition of learning objectives: the learning objectives must be precise and well-articulated. Because all activities (even gamification activities) would appear worthless if the learning objectives are not achieved, the goal of education is to accomplish those goals.

3. Creation of educational content and activities for gamification: the teaching material should be entertaining, interactive, and full of multimedia components. The learning objectives should guide the development of the training activities, which should also allow multiple performances, feasibility, increasing difficulty level and multiple paths.

4. Adding game elements and mechanism: The incorporation of learning objectives is the essential component of gamification. As tasks are completed, points are accumulated, levels are advanced, and prizes are awarded. Many of these acts are intended to accomplish a defined learning goal.

It is important to mention that every step stated in the previously mentioned list was considered at the moment of planning and designing the intervention alongside with the material for each session.

Gamification has been recognized as a valuable tool for enhancing vocabulary learning in English language education. Several studies have investigated the impact of gamified vocabulary learning apps on students' motivation and learning outcomes. For example, a study by Chen and Zhao (2022) examined the acceptance of gamified vocabulary learning apps among Chinese college students. The study found that implementing gamification in mobile-assisted language learning can enhance students' motivation to learn English vocabulary.

Similarly, Fu et al. (2021) explored the perceptions of non-English major college students regarding learning English vocabulary with gamified apps. The study revealed that gamified vocabulary learning apps have the potential to enhance students' motivation and learning habits in English language education.

Furthermore, Trinh et al. (2022) investigated the perceptions of teachers and students regarding the use of digital games in improving vocabulary for non-English-majored students. The study found that incorporating gamification in vocabulary learning can be beneficial for enhancing students' vocabulary knowledge.

In addition, a study by واعر (2021) examined the use of gamification in EFL vocabulary learning and learners' attitudes toward gamification use. The study found that gamification was effective in enhancing EFL learners' vocabulary knowledge and was perceived as more exciting and enjoyable than traditional learning methods.

Finally, after a literature review, Caponetto (2014) concludes that adoption of gamification approaches is primarily motivated by improving motivation and engagement in learning activities, which makes learning more alluring, fascinating, and ultimately efficient. Among the conclusions it is important to mention that in addition to addressing transversal attitudes and behaviors like cooperation, creativity, and self-guided study, gamification approaches are being used to assist learning in several educational environments and subject areas.

These studies collectively demonstrate that gamification can be a valuable approach for enhancing vocabulary learning in English language education. By incorporating game elements and interactive features, gamified vocabulary learning apps can motivate students to engage with the material, making the learning process more enjoyable and effective. Gamification can also provide opportunities for personalized learning experiences and immediate feedback, which can further enhance students' vocabulary acquisition. However, it is important to consider factors such as internet access and the design of gamified apps to ensure optimal learning experiences for students.

2.4 Quizziz

If we consider what was previously stated, Quizziz earns a place among the apps/software that should help our students to improve their vocabulary level. This is due to the characteristics of this software. It has features of CALL, MALL and SRS since it is computer software and students' phones are needed. Also, the format in which students answer resembles a clicker or a student response system.

Quizizz is a platform that aids students in learning English vocabulary through various features and characteristics that set it apart from other platforms. One of the key advantages of Quizizz is its mobile-assisted learning capabilities. Research conducted by Mustaffa and Sailin (2022) found that the use of Quizizz as a mobile self-access learning tool helped students acquire idioms and improve their writing skills. This highlights the effectiveness of Quizizz in facilitating vocabulary development.

Another characteristic that makes Quizizz stand out is its game-based learning approach. Putra (2023) conducted a classroom action research study and found that the use of Paper-Mode Quizizz, a game-based learning platform, enhanced students' vocabulary at the eighth-grade level. The interactive and engaging nature of Quizizz makes it a fun and enjoyable tool for students to learn and practice vocabulary.

Furthermore, Quizizz incorporates gamification elements that contribute to increased learning engagement and motivation. Inayati and Waloyo (2022) conducted a study on the influence of Quizizz gamification on online English language teaching and found that EFL university students had a positive perception and high motivation when Quizizz was applied to online English learning. The competitive nature of Quizizz, coupled with its incentive elements, helps students practice and experience the target language, thereby enhancing their communicative competencies (Kazu & Kuvvetli, 2023).

Additionally, Quizizz offers a technology-based learning evaluation application that can be accessed online by teachers and students. Roysa and Hartani (2020) concluded that the use of Quizizz as an online learning application during the pandemic provided an alternative learning method that could be accessed both inside and outside the classroom. This flexibility allows students to engage in self-paced learning and access educational resources at their convenience. Following the same line of thought, Huei (2021) stated that Quizizz has been found to be particularly beneficial for vocabulary learning, especially in the context of the COVID-19 pandemic. It has been identified as the best gamified-learning application for vocabulary learning, aligning with the research that supports its effectiveness in improving English vocabulary achievement.

Moreover, Quizizz has been widely recognized as an effective tool for second language acquisition. Research has shown that Quizizz can be utilized in language classrooms to enhance learning and teaching contexts (Pham, 2022). In similar work, Zuhriyah and Pratolo (2020) suggested that Quizizz has been found to support students in learning, increase their engagement, enjoyment, concentration, and motivation in the classroom.

Regarding students' perceptions, Hussain et al. (2023) and Bahar et al. (2022) discuss the relationship between students' perceptions and their learning outcomes in specific subjects, indicating that students' perceptions can significantly impact their achievement. This suggests that understanding students' perceptions of Quizizz for vocabulary acquisition is crucial for evaluating its effectiveness. Which aligns perfectly with this research's objectives.

In summary, Quizizz is a valuable platform for English vocabulary learning due to its mobile-assisted learning capabilities, game-based approach, gamification elements, and flexibility in online learning. These characteristics contribute to improved vocabulary acquisition, increased engagement, and enhanced motivation among students. By utilizing Quizizz, students can enjoy a fun and interactive learning experience while developing their English vocabulary skills. All qualities previously mentioned were fundamental features that put Quizizz above other platforms as a suitable tool for carrying out this intervention.

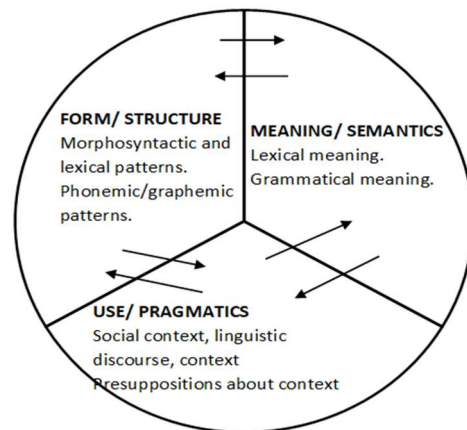
2.5 A three-dimensional grammar framework

Larsen-Freeman (2001) claimed that it is not useful to think about language as a separate collection of static, useless building blocks. Furthermore, it is not useful to only see grammar as a set of prescriptive rules governing language structure, such as prohibitions against splitting infinitives or prepositional phrase endings. In the same work Larsen-Freeman (2001) proposed a framework to evaluate grammar with the form of a pie chart. Its form makes it clear that three aspects of grammatical complexity must be taken into consideration when working with them: structure or form, semantics or meaning, and the pragmatic constraints controlling usage. Finally, the arrows that connect each wedge of the pie together also show how the three dimensions are interrelated, thus any changes to one of the wedges would affect the other two.

It is important to remember that vocabulary is a component of grammar. Since one of the objectives of this research is to assess participants' vocabulary previously and after the intervention, Larsen-Freeman's framework will be used to design the pre-intervention test and the post-intervention test.

Figure 1

Three-dimensional framework



The meaning dimension refers to the understanding of word meanings and their associations. Research has shown that repetition and exposure frequency play a crucial role in vocabulary acquisition (Mohamed, 2017). Repeated exposure to words in reading materials helps learners develop a deeper understanding of word meanings and form-meaning connections (Mohamed, 2017). Additionally, questions about word meaning during the learning process can enhance vocabulary acquisition (Barcroft, 2003).

The form dimension focuses on the phonological and orthographic aspects of words. Phonological short-term memory and phonotactic probability influence word learning and retention (Gupta & Tisdale, 2009). The cognitive effects of repetition on lexical processing and retention have been observed in eye-movement studies (Mohamed, 2017). Mastery of different aspects of vocabulary knowledge, such as spoken and written forms, morphological knowledge, and collocational knowledge, is essential for a comprehensive understanding of word forms (Neary-Sundquist, 2015).

The use dimension emphasizes the application of vocabulary in different contexts and language skills. Vocabulary knowledge is crucial for reading comprehension, as it enables learners to understand written texts more effectively. In writing, a wide range of vocabulary allows learners to express themselves accurately and precisely. Vocabulary also plays a vital role in listening and speaking, enabling learners to understand spoken language and communicate effectively.

The integration of these three dimensions is essential for effective vocabulary acquisition. Teachers' cognitions about vocabulary instruction, including their beliefs, understanding, and perceptions, influence their instructional practices (Hermagustiana et al., 2017). Implicit and explicit cognitive processing can contribute to incidental vocabulary acquisition (Örsemir, 2017). Multidimensional models of

vocabulary knowledge, such as the Vocabulary Knowledge Scale, provide a comprehensive assessment of vocabulary depth and understanding (Stewart et al., 2012).

Overall, vocabulary learning involves the acquisition of word forms, meanings, and their application in different contexts. The three-dimensional framework of meaning, form, and use provides a comprehensive understanding of vocabulary acquisition. Repeated exposure, form-meaning connections, and contextual application are crucial for effective vocabulary learning. Teachers' cognitions and instructional practices also play a significant role in supporting vocabulary development. Finally, after having proven to be crucial for vocabulary learning, the three-dimensional framework was considered to design the instrument used during the pre and post intervention test.

2.6 Literature review summary

First, learning and acquisition are terms that are easily misunderstood when it comes to vocabulary. On one hand, acquisition refers to all the natural processes people experience when learning a language. For example, learning the first language (L1). On the other hand, there is learning. Which implies an effort and an intention of learning towards the target language. It is relevant to know how to differentiate these concepts to plan lessons and guide students to their goals.

Second, the awareness of the importance of vocabulary when learning a second language cannot be skipped. As teachers, it is a must to be aware how a robust vocabulary set might have relevant repercussions in all four language skills (speaking, listening, reading, and writing). Keeping this in mind, it is possible to explore different approaches to promote vocabulary learning. Among the most popular it is possible to find activities based on SRS, CALL, MALL, and Gamification.

Finally, among all the different possible activities or platforms to work with. Quizizz earns a place on top, this is because throughout the entire interface it is possible to find a combination of the different approaches previously mentioned. This combination allows participants to deal with vocabulary in its three dimensions, which are: meaning, form and use.

Chapter III: Method

3.1 Type of research

Overall, researchers emphasize the iterative and cyclical nature of action research, as well as its focus on problem-solving, reflection, and collaboration. "Action research is a form of self-reflective research that is used by professionals to improve their practices through an iterative process of planning, acting, observing, and reflecting" (Stringer, 2014, p. 4). Following the same direction, "action research is a cyclical process that involves problem identification, action planning, implementation, evaluation, and reflection" (Mertler, 2017, p. 81).

This project can be placed in the category of action research. It comes from the necessity of improving practices and promoting positive changes. Also, this action research involves cycles of planning, action, reflection, and evaluation. Finally, this work fits the model since action research is often used in fields such as education, healthcare, and social work.

3.2 Participants

This project takes place at a school located in Yungay's urban area. Among its characteristics it is important to mention that this school houses students from kindergarten up to 12th grade with just one class per level. It is also important to mention that according to *Síntesis del Proyecto Educativo Institucional*:

The social, cultural and economic reality of the families with which the school works, is characterized by having a level of education that fluctuates between the 8th and the 12th year mainly. About 70% of families are vulnerable or belong to social assistance programs. The majority of householders work as dependent workers of logging companies in the area or seasonal jobs, which does not allow them to access higher income. Many of these families are single parents, whose primary role is performed by the mother or grandmother, and are characterized by being respectful, supportive, participatory, responsible, concerned families and with high expectations in the education of their children. (p. 9)

Since the institution follows the national curriculum, it is possible to find among the goals of the school the promotion of learning English as a foreign language. The purpose of doing so goes beyond just linguistic development. The final goal is to provide a rich environment in terms of tools and strategies for the students to use to get a better understanding of different cultures, their views of the world, and to use

new technologies to access knowledge through different paths (Unidad de Currículum y Evaluación Ministerio de Educación, 2023).

Miles (2013) suggested that In-depth studies of small samples of individuals who are nested in their setting are typical practices for qualitative researchers. Unlike quantitative researchers, who seek statistical significance and bigger numbers of context-free examples. Based on what was previously stated, participants for this research will be 6th graders from the previously referred institution. This class consists of 44 students whose age ranges between 11 and 13 years old. This group was selected by the principle of convenience sampling, which means the researcher chooses participants because they are already available or convenient to access (Saunders, 2018).

3.3 Research problem

Even though the school promotes the learning of English as a foreign language, it has faced issues along the way. Of all the obstacles, the one that called my attention is the fact that most of the students seem to struggle when it comes to vocabulary acquisition. Due to the transverse nature of vocabulary, it has been proved to have repercussions in all the four abilities: reading, speaking, listening, and writing. Ahmad-(2012) concluded that “word power facilitates fluent speaking and effective writing. It substantiates both: learners’ acquisition of knowledge and production of knowledge. It enriches learners' integrated language skills such as listening, speaking, reading, and writing” (p. 71.).

To address the issue, the proposal is to implement the use of the platform Quizizz at the end of the lesson, during the closing stage. The idea is to generate a space in which the students can be part of an activity aiming to foster their intentional vocabulary learning. Ahmad (2012) mentioned that learning vocabulary intentionally involves using strategies like crossword puzzles, multiple choice, word substitution, synonyms, antonyms, and more.

Among different researchers, Quizizz has proven to be useful in the classroom. Pesántez-Sigüenza (2023) concluded that through games like Quizizz and Wordwall, vocabulary words can be meaningfully learned by students because they are motivated, engaged, self-assured, and eager to learn. Additionally, the game's fun elements lower their anxiety, and they enjoy learning that way. Finally, according to results and discussions from Liong et al. (2019), Quizizz enhanced the accomplishment scores of forty suburban secondary school students acquiring English language idioms.

3.4 Research question and objectives

Upon recognizing the issue, I aimed to tackle within the classroom, it became imperative to devise a solution. Based on my proposal, the following question arises: What are the contributions of using Quizizz as a strategy to complement intentional vocabulary learning among 6th graders?

- The general objective for this research is to explore the contributions of using Quizizz as a strategy to complement incidental vocabulary learning among 6th graders.
- To achieve the general objective, there are steps to follow. First, to assess students' vocabulary knowledge before and after the intervention.
- Second, to describe participants' perception of Quizizz as a strategy to complement intentional vocabulary learning.
- Finally, to describe a fellow colleague's perception of Quizizz as a strategy to complement intentional vocabulary learning.

3.5 Stages of the action research

The study consisted of a total of four interventions in which Quizizz was used as a tool to assign activities as homework. It is also important to mention that besides those four interventions, participants also took part in the pre and post intervention tests. Additionally, before each activity a video was recorded, edited, and sent by the teacher to students and parents to give general guidelines and minimize the chances of misunderstanding during the activity. While working the first three sessions, students dealt with one vocabulary dimension in each one of them. First, meaning. During this activity participants were supposed to recall meaning from an image and select the correct word that matched the picture. Second, form. At this point, students were shown an image representing a word from their Unit's thematic vocabulary and they needed to select the alternative that was written in its correct form. Third, use. During this session, participants were shown an image without any prompt text, and they had to use that word in a meaningful sentence. Finally, during the fourth session they faced exercises from all the previous sessions combined. As we shall see below, figure 1, shows a summary of the action plan corresponding to this research. To have a full description of the action plan, please see appendix 1.

Table 1*Action plan's summary*

Date	Session
May 23 rd	Pre-test
May 25 th	Session 1: meaning recall
May 30 th	Session 2: Identify form
June 1 st	Session 3: Using the word in a sentence
June 6 th	Session 4: All previous exercises combined
June 8 th	Post-test, focus group, and peer interview

3.6 Data collection techniques

To fulfill the objectives of the research and to generate trustful results, instruments need to be carefully selected and created. Mensah (2020) claimed that the choice of suitable research tools to collect data that enables analysis to result in the development of believable and persuasive answers to research questions or objectives cannot be decided arbitrarily. In addition, several aspects need to be considered when designing instruments. Paradis (2016) suggested that when attempting to carefully design the data collection instruments, it is necessary to consider the context being studied as well as the participants and informants involved in the research. Additionally, it is important to validate all the instruments and decide who will do what, where, when, and how at the various stages of the research process. Considering the information provided by literature, data collection instruments validated by experts are the following:

3.6.1 Pre and post intervention test (See appendix 2)

To address the first objective, a modification of the test used by Calisto et al. (2018) will be used. This test is also a modification of the vocabulary knowledge scale developed by Paribakht and Wesche (1997). This scale describes five stages in which vocabulary learning may occur:

Stage 1: The word is not familiar at all.

Stage 2: The word is familiar, but the meaning is not known.

Stage 3: A correct synonym or translation is given.

Stage 4: The word is used with semantic appropriateness in a sentence.

Stage 5: The word is used with semantic appropriateness and grammatical accuracy in a sentence.

To answer the test, a printed version of it was given to each student. They had 45 minutes to answer the entire extension of the test. The instructions and guidelines were communicated by the teacher and remained projected on the whiteboard. Students needed to read every word one by one, and then circle the category which better reflected their knowledge about each word. For some categories there was a space in which students could complement their answers. In addition, this scale complements Larsen-Freeman's (2001) framework, wherein vocabulary, regarded as integral to grammar acquisition, necessitates management across three interconnected levels: meaning recall, form, and use, such that the impact on one level affects the other two.

Following this research's directions, the selected words for the pre and post-test will be taken from *Planes y programas curricular* guidelines. Said document identifies a group of keywords as part of the expected learnings in the unit:

- Vocabulary related with food: Apple, Avocado, Bacon, blueberry, broccoli, butter, beans, Cake, Carrot, Cheese, Chicken, Corn, Egg, Fish, flour, Garlic, Grape, Honey, Lemon, Lettuce, Meat, Milk, Peanut, Pumpkin, Sausage, Turkey.

3.6.2 Focus group (See appendix 3)

To gather data about participants' perception after the intervention, the instrument selected is the focus group. This is a good technique to record similar and divergent points of view because they enable researchers to record participants' responses to the remarks and ideas given by other participants.

Paradis (2016) defines the focus group as a tool used to get information from a group of people, either by having the moderator conduct interviews with each person in turn or by using a script to encourage dialogue.

Considering the participants' age, students per group will be reduced to 6. Students were selected at random and were asked to participate voluntarily.

Krueger (2000) as cited in Breen (2006) provided a helpful overview of the many types of questions and how to use them during the interview. There are 5 questions

that always should be considered: opening, introductory, transition key and ending question.

For this research matter the focus group consisted of five questions which were organized into three dimensions: awareness of changes in the activities, perceptions about the use of Quizizz as homework, and engagement level.

3.6.3 Semi structured interview (See appendix 4)

Finally, to explore a fellow colleague's perceptions about the intervention, a semi structured interview was selected as the instrument. Baez (2002) stated that through qualitative interviewing, we may deepen or increase our knowledge of a particular set of problems or experiences.

For this research matter the semi structured interview consisted of five questions, which were organized into three dimensions: awareness/knowledge about using this technology to do homework, perceptions about using this technology to do homework, and perceptions about the use of Quizizz as homework.

3.7 Data analysis techniques

Data analysis is crucial in action research as it allows researchers to make informed decisions based on the information collected. It helps in identifying trends, patterns, and relationships between variables that are essential in understanding the problem at hand and developing effective solutions.

Kemmis and McTaggart (1988) contended that data analysis is important in action research because it helps researchers to understand the complexity of the problem and its context. They argue that data analysis enables researchers to identify patterns, relationships, and trends that are critical in understanding the problem and developing appropriate solutions.

Similarly, according to Stringer (2014), data analysis is crucial in action research as it helps researchers to identify the root cause of the problem and develop effective solutions. He argues that data analysis enables researchers to collect evidence that supports their hypotheses and theories, thus providing a clear understanding of the problem.

Considering what has been already stated, the data analysis techniques will be the following:

3.7.1 Descriptive statistical analysis

For the pre and post intervention test descriptive statistical analysis will be used. This is the type of data analysis that involves summarizing and describing the characteristics of a dataset. It aims to provide a clear and concise picture of the data, including measures of central tendency, variability, and frequency distribution. In this section, I will provide the views of different authors on descriptive statistical analysis.

According to Hair et al. (2019), descriptive statistical analysis is an essential tool for summarizing and presenting data. They argue that it provides a clear and concise description of the data, which is critical in understanding the underlying patterns and relationships between variables.

Similarly, Field (2018) contended that descriptive statistical analysis is a useful technique for describing the main features of a dataset. He argues that it enables researchers to summarize the data in a way that is easy to understand and interpret.

3.7.2 Thematic analysis

Thematic analysis is a widely used and effective data analysis technique for various types of interviews. It allows researchers to identify and analyze recurring patterns or themes in qualitative data (Lindegard et al., 2021; Strachan et al., 2016; Besker et al., 2020). Thematic analysis is particularly suitable for interviews that use open-ended questioning and aim to generate narratives (Guest et al., 2020).

One advantage of thematic analysis is its ability to facilitate a rich and detailed exploration of data (Lloyd et al., 2018). It allows researchers to capture and report important patterns of meaning related to the research phenomenon (Besker et al., 2020).

Overall, thematic analysis is a valuable technique for analyzing interview data as it allows researchers to uncover meaningful patterns and themes in a systematic and rigorous manner. It provides a comprehensive and detailed exploration of the data, enabling researchers to gain insights and generate knowledge from qualitative interviews.

Regarding this investigation, the thematic analysis was carried out in different stages. First, the interviews were transcribed by using software word's integrated transcribing tool. After that, the transcriptions were revised by the researcher to make sure that the information provided by the software matched the one in the interviews. Second, once the transcriptions were revised, different colors were used to highlight patterns, answers or statements with similar vocabulary or expressions

aiming for the same ideas. Finally, a chart was used to create all themes and subthemes. In addition, said chart includes relevant information such as frequency and extracts taken directly from the interviews to provide meaningful data produced by the participants.

Chapter IV: Findings

Throughout this chapter, the data gathered from the intervention will be presented in accordance with the specific objectives.

4.1 SO1: To assess students' vocabulary knowledge before and after the intervention.

To achieve the first objective of this study, pre and post intervention tests were carried out. These involved the same words and conditions. Participants had to read each word and put it into the corresponding category based on their vocabulary knowledge. Each category is explained in Figure 2.

Figure 2

Definition of the different categories for vocabulary

Categorías:	
1.	No recuerdo haber visto esta palabra antes.
2.	He visto esta palabra antes, pero no sé qué significa.
3.	He visto esta palabra antes, y creo que significa _____ (Sinónimo o traducción).
4.	Conozco esta palabra. Significa _____ (Sinónimo o traducción).
5.	Puedo usar esta palabra en una oración:

To compare the participants' performance before and after the use of Quizziz, the mean score was calculated for each category based on the frequency of the answers. The results of the pre-intervention test for each participant and the mean score for each category are displayed in Table 2.

Table 2

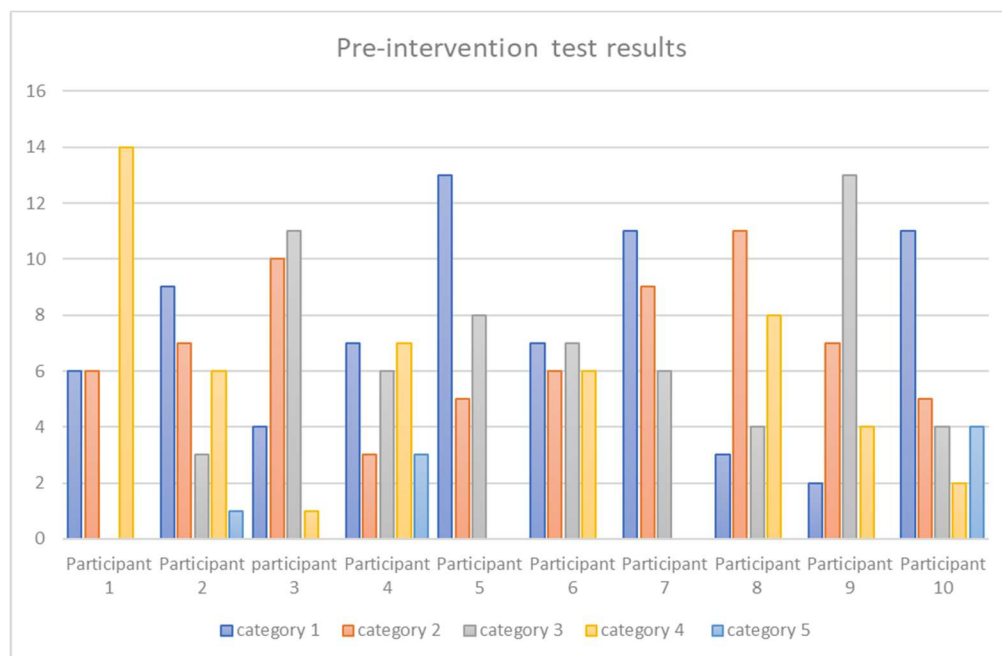
Pre-intervention test results

Pre intervention test	Frecuency of the answers				
Participant	category 1	category 2	category 3	category 4	category 5
Participant 1	6	6	0	14	0
Participant 2	9	7	3	6	1
participant 3	4	10	11	1	0
Participant 4	7	3	6	7	3
Participant 5	13	5	8	0	0
Participant 6	7	6	7	6	0
Participant 7	11	9	6	0	0
Participant 8	3	11	4	8	0

Based on the data displayed in Table 2, it is possible to say that before the intervention most of the students' answers were placed in the first three categories, which shows they had no vocabulary knowledge, or they were not certain about their vocabulary knowledge (See Figure 3.)

Figure 3

Pre intervention test results bar-graph



Concerning the pre-intervention test, participants considered in the lowest level are the ones who got a higher number of answers classified under the first three categories. In this case, two students put all their 26 answers under the previously mentioned categories. It is important to note that even though some of the answers under category three are correct, said category means there is no certainty about their meaning, but participants do recognize the form of the word. Some pre intervention test's extracts that illustrate these participants' answers are:

Figure 4

Pre-intervention participants test's extracts

FISH	1	2	3	4	5
------	---	---	---	---	---

PEZ (Participant 7)

MILK	1	2	3	4	5
------	---	---	---	---	---

LECHE (Participant 5)

FLOUR	1	2	3	4	5
-------	---	---	---	---	---

FLOR (Participant 5)

Now, regarding the post-intervention test's results, the procedure was the same. The mean score was calculated for each category based on the frequency of the answers. The results for each participant and the mean score for each category are displayed in Table 3.

Table 3

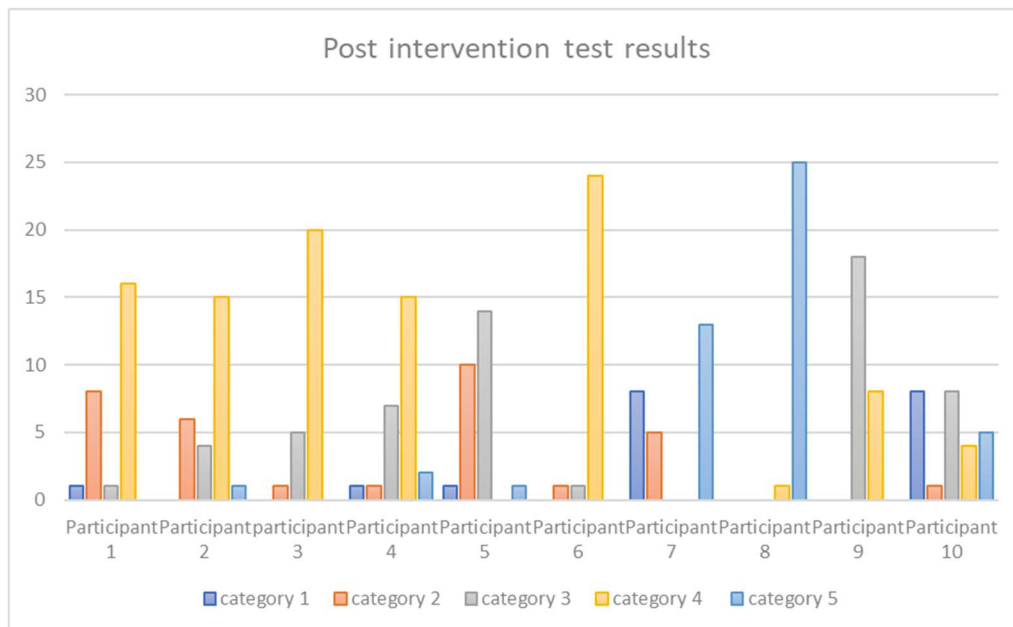
Post-intervention test results

Post intervention test	Frequency of the answers				
Participant	category 1	category 2	category 3	category 4	category 5
Participant 1	1	8	1	16	0
Participant 2	0	6	4	15	1
participant 3	0	1	5	20	0
Participant 4	1	1	7	15	2
Participant 5	1	10	14	0	1
Participant 6	0	1	1	24	0
Participant 7	8	5	0	0	13
Participant 8	0	0	0	1	25
Participant 9	0	0	18	8	0
Participant 10	8	1	8	4	5
Mean scores post test	1,9	3,3	5,8	10,3	4,7

Based on the data displayed in Table 4, it is possible to say that after the intervention, most of the students' answers were placed from category 3 up to category 5, which shows an improvement in their vocabulary knowledge (See Figure 5).

Figure 5

Post intervention test results



Concerning the post intervention test, participants considered in the highest level are the ones who got a higher number of answers classified under the last two categories (categories 4 and 5). In this case, the higher scores are obtained by one student who put all his 26 answers under the previously mentioned categories and another one who obtained 24 answers under said categories. It is important to note that in most cases, answers under category five follow a simple pattern of expressing likes or dislikes regarding food. This is due to national guidelines which state that content according to participants' grade. Some post intervention test's extracts that illustrate these participants' answers are:

Figure 6

Post intervention participants test's extracts

APPLE	1	2	3	4	5
-------	---	---	---	---	---

4+5, MANZANA, I REALLY LIKE APPLE (Participant 8)

BACON	1	2	3	4	5
-------	---	---	---	---	---

4+5, TOCINO, I DON'T LIKE BACON (Participant 8)

BUTTER	1	2	3	4	5
--------	---	---	---	---	---

MANTEQUILLA (Participant 6)

CHEESE	1	2	3	4	5
--------	---	---	---	---	---

QUESO (Participant 6)

To have a clear understanding of the results, it is necessary to compare the mean scores from the pre and post intervention tests. The results are displayed in Table 4.

Table 4

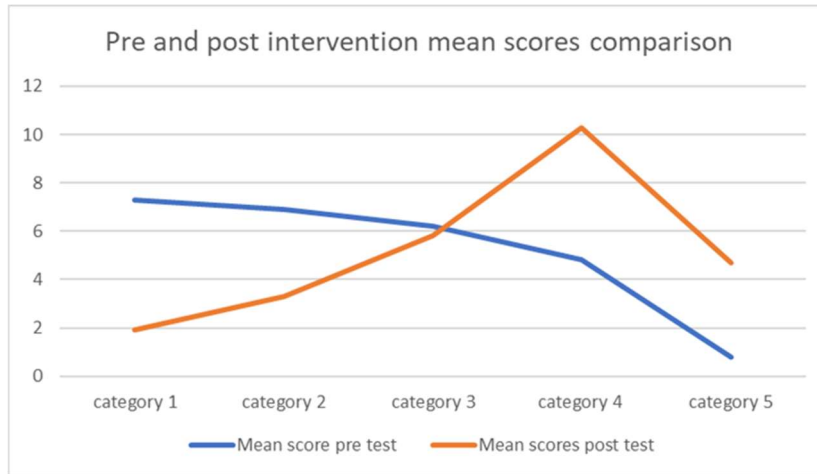
Pre and post intervention tests' mean scores chart comparison

	category 1	category 2	category 3	category 4	category 5
Mean scores pre test	7,3	6,9	6,2	4,8	0,8
Mean scores post test	1,9	3,3	5,8	10,3	4,7

Based on the data displayed in Table 4, it is possible to observe a considerable decreasing trend in the first 3 categories concerning the post intervention test, especially in one and two. Category 1 had a decrease of 73%, category 2 decreased by 52%, and category three decreased by 6,45%. On the other hand, categories 4 and 5 went upward after the intervention. Category 4 increased by 46,6%, and category 5 increased by 17,02 % (See Figure 7.)

Figure 7

Pre and post intervention mean scores line graph comparison



Finally, it is necessary to illustrate the results obtained from the participants who improved the most during the entire extension of the intervention. Tables 8, 9, and 10 display the data obtained from three participants and their answers in the pre and post intervention tests.

Table 5

Comparison of participant 3's tests

Participant 3	Frequency of the answers				
////////////////////////////////////	category 1	category 2	category 3	category 4	category 5
Pre intervention test	4	10	11	1	0
Post intervention test	0	1	5	20	0

Table 6

Comparison of participant 6's tests

Participant 6	Frequency of the answers				
////////////////////////////////////	category 1	category 2	category 3	category 4	category 5
Pre intervention test	7	6	7	6	0
Post intervention test	0	1	1	24	0

Table 7

Comparison of participant 8's tests

Participant 8	Frequency of the answers				
////////////////////////////////////	category 1	category 2	category 3	category 4	category 5
Pre intervention test	3	11	4	8	0
Post intervention test	0	0	0	1	25

Based on the data displayed in tables 8, 9, and 10, it is possible to observe a considerable increasing trend in categories four and five concerning the post intervention test. Participant 3 showed an improvement of 76%, followed by Participant 6 who improved by 90%, and finally, Participant 8 who improved by 100% (See Figures 8, 9 and 10).

Figure 8

Graphic comparison of participant 3's tests

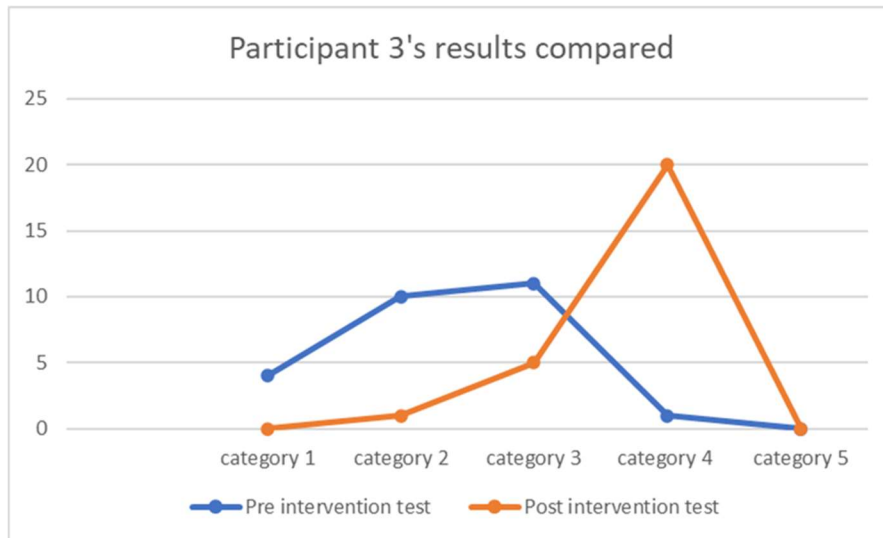


Figure 9

Graphic comparison of participant 6's tests

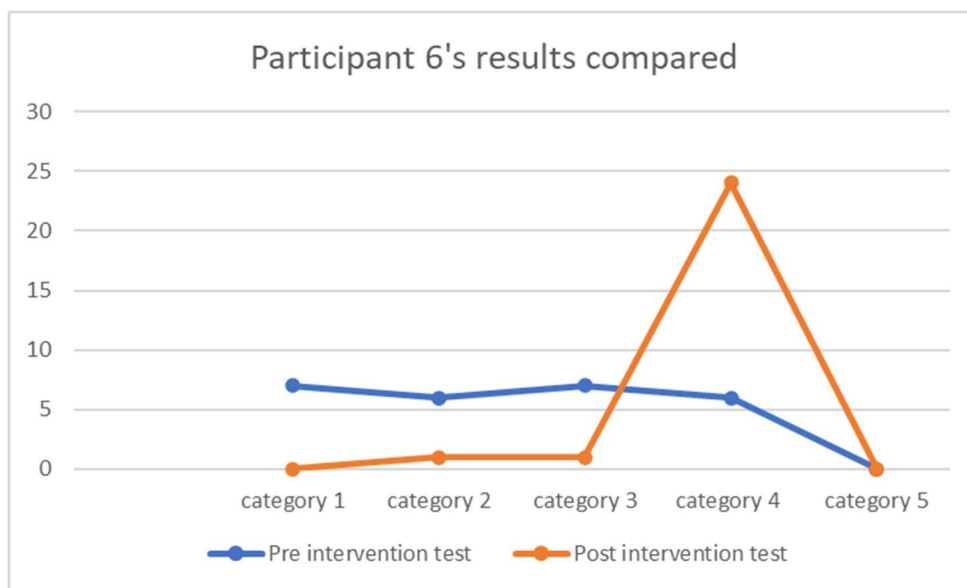
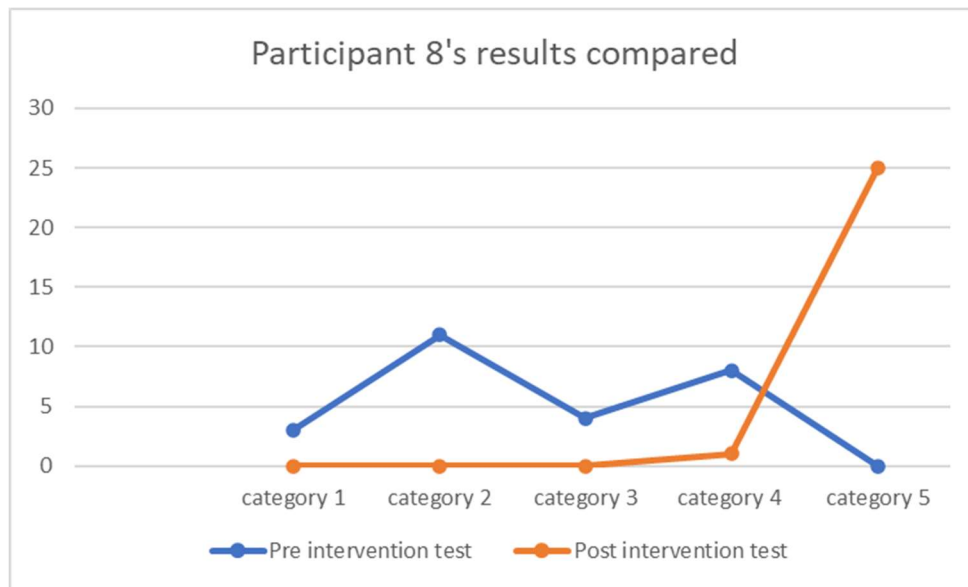


Figure 10

Graphic comparison of participant 8's tests



4.2 SO2: To describe participants' perception of Quizizz as a strategy to complement intentional vocabulary learning among 6th graders.

To address this objective, after completing the intervention, a group of students were asked to voluntarily participate in a focus group interview. From those answers, two different themes with their corresponding sub-themes arose, after conducting thematic analysis (See Table 8).

Table 8

Focus group interview themes and sub-themes

Themes	Sub-themes
Quizizz app contributions	Vocabulary knowledge development.
	Engagement with the new activity
	Preference over traditional activities
	Possibility of using the app in other subjects
Quizizz implications	Connection issues
	Cheating during activities

The thematic analysis focused on the number of times that participants' answers referred to certain topics or followed similar patterns. Each theme and sub-theme are displayed with their frequency and corresponding interview extracts in Table 15.

Table 9*Focus group thematic analysis displayed in detail*

Theme	Sub-theme	Frequency	Interview extracts.
Quizizz app contributions	Engagement with the new activity	9	<p>“Es más entretenida la clase ” (Participant 2)</p> <p>“Si, porque es más divertido, es como. Hay preguntas muy cómo, hay que saber qué fruta o verdura es y después ponen el nombre” (Participant 5)</p>
	Vocabulary knowledge development.	8	<p>“Aprendimos nuevas palabras de comida en inglés, como, por ejemplo, garlic, cake, turkey. (...)” (Participant 6)</p> <p>“Y también, como por ejemplo, ahora estamos aprendiendo, countable and uncountable y también los sabores. (...)” (Participant 1)</p>
	Preference over traditional activities	7	<p>“este nuevo método es mucho más divertido que el anterior porque el profesor no nos Hace escribir tanto.” (Participant 4)</p> <p>“aprendimos de una diferente manera a como lo hacíamos antes, que era puro, como escribir y ver vídeos.” (Participant 3)</p>
	Possibility of using the app in other subjects	6	<p>“Así que diría yo que hiciéramos esto mismo en otras materias.” (Participant 1)</p> <p>“Lo otro que eso lo deberíamos aplicar a historia.” (Participant 5)</p>
Quizizz implications	Connection issues	2	<p>“la que sí es la primera vez como que saturó más o menos y fue como complicado” (Participant 6)</p> <p>“Después intentamos hacerlo por filas. Pero tampoco funcionó porque cada fila estaba. Ocupábamos mucho Internet” (Participant 4)</p>

	Cheating during activities	2	<p>“Sería como injusto porque tendría un libro al lado.” (Participant 3)</p> <p>“A mí no me gustaría, o sea divertido, o sea, me gustaría, pero se podría, pero se. Puede hacer trampas muy fáciles.” (Participant 2)</p>
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4.2.1 Quizziz app contributions

The first theme derived into four sub-themes: **Vocabulary knowledge development**, **Engagement with the new activity**, **Preference over traditional activities** and **Possibility of using the app in other subjects**. Concerning the first sub-theme, participants mentioned eight times that they felt their vocabulary was improving. Some interview extracts that illustrate subtheme **Vocabulary knowledge development** are:

“...estamos aprendiendo a más inglés que la forma tradicional” “Bien aprendimos cosas nuevas como artículos de cocina, plural, eso.” (Participant 2).

“Aprendimos más cosas y tenemos como más actividades que hacer...” (Participant 4).

“... también aprendimos más cosas y como palabras nuevas y eso.” (Participant 5).

For the second sub-theme, participants mentioned nine times that they felt more motivated to do the activity since it looked like more fun for them. Some interview extracts that illustrate subtheme **Engagement with the new activity** are:

“es como una tarea, pero divertida.” (Participant 3).

“Sí me gustaría hacer más actividades como esta, ya que es más dinámico y entretenido.” (Participant 6).

“... Con esto es más alegre hacer tarea” (Participant 1)

Regarding the third sub-theme, students mentioned seven times that they would rather do homework using Quizziz than the traditional way. They also manifested that they do not like extensive writing activities. Some interview extracts that illustrate subtheme **Preference over traditional activities** are:

“... aprendimos de una diferente manera a como lo hacíamos antes, que era puro, como escribir y ver vídeos.” (Participant 4).

“... este nuevo método es mucho más divertido que el anterior porque el profesor no nos hace escribir tanto.” (Participant 2).

“... A mí me gustó más la de ahora porque no escribimos tanto como las clases anteriores.” (Participant 5).

Finally, for the fourth sub-theme, participants stated six times that they would like to do activities using Quizziz in different school subjects. Some interview extracts that illustrate subtheme **Possibility of using the app in other subjects** are:

“... aparte del minijuego principal de Quizziz, hay otros más en inglés de que se puede hacer, que son de Ciencias, historia, matemáticas y todo eso.” (Participant 6).

“... Si hay y también en otras materias porque son muchos minijuegos de de distintas materias entonces, se puede juntar inglés con todas las materias.” (Participant 1)

4.2.2 Quizizz implications

The second theme derived into two sub-themes: **Connection issues** and **cheating during the activity**. Regarding the first sub-theme, students mentioned two times that the internet network at school was an issue in most cases, due to saturation and failure of said network. In order to illustrate the sub-theme **Connection issues** the figure below represents a summary of the most frequent concepts and ideas given by the participants throughout their responses. (See figure 11)

Figure 11

Connection issues word cloud



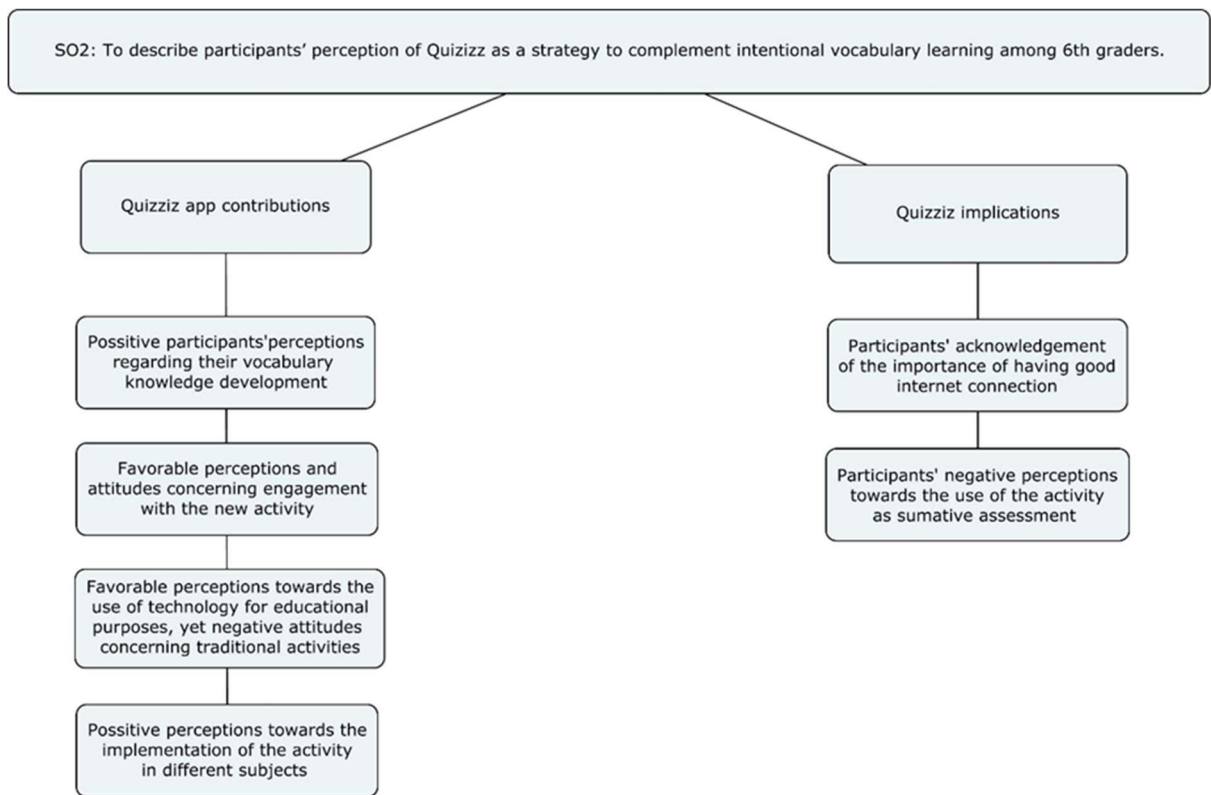
still acknowledge that if they got the chance to be evaluated like this, cheating or getting the answers from other sources would be something easy to do and the results would not be reliable at all.

4.2.3 Specific objective two summary

Figure 13 below shows a summary of the fellow participants' perceptions related to the second specific objective.

Figure 13

Participants' perceptions summary



Based on the information displayed in figure 18, it is possible to observe that participants showed a pattern following positive reactions or attitudes towards the use of Quizziz as homework. As shown in the first theme, participants demonstrated favorable perceptions concerning their own vocabulary knowledge development and engagement with the activity. On the same line, participants also made clear their preference of educational activities involving technology over traditional ones, alongside their willingness to implement the strategy in other subjects. Secondly, concerning Quizziz implications, it is possible to observe how participants

acknowledged two important ideas. On one hand, the need of good internet connection, and on the other, the low possibilities of using this activity as summative assessment due to the considerable chance of cheating in order to get the correct answers.

4.3 SO3: To describe a fellow research practitioner’s (FRP) perception of Quizizz as a strategy to complement intentional vocabulary learning among 6th graders

After completing the intervention, a fellow research practitioner who was present in the intervention sessions voluntarily participated in an open-ended interview. From those answers three different themes with their corresponding sub-themes arose, after conducting thematic analysis. (See Table 10).

Table 10

Fellow research practitioner’s (FRP) interview themes and sub-themes

Themes	Sub-themes
Prior knowledge of the area	Colleagues’ experiences with quizziz
	Similar platforms experience
Quizizz app contributions	Good use of technology
	Platform features
Quizizz implications	Students’ technological literacy
	External factors

The thematic analysis focused on the number of times that a fellow research practitioner’s answers referred to certain topics or followed similar patterns. Each theme and sub-theme are displayed with their frequency and corresponding interview extracts in Table 11.

Table 11*Fellow research practitioner's interview thematic analysis displayed in detail*

Themes	Sub-themes	Frequency	Interview extracts.
Prior knowledge of the area	Colleagues' experiences with Quizizz	1	"tuvimos como un mini taller donde colegas que experimentaban con otros tipos de evoluciones o de dinámica, utilizando tics trazar sus clases. Entonces yo la conocí, por eso había escuchado hablar de ella."
	Similar platforms experience	2	"He utilizado lo más similar y que estoy seguro de que cabe dentro de la misma categoría. Pues me podrás corregir era los kahoot." "los kahoot la había utilizado en en otros colegios sí anteriores"
Quizizz app contributions	Good use of technology	2	"ayuda a involucrar todo este tema de la tecnología que sobre todo hoy en día los niños pasan demasiado tiempo, saben más que uno incluso" "pero en casos como estos es provechoso y ya que ellos tienen un mayor dominio. uno puede explotarlo para fines pedagógicos como este en este caso."
	Platform features	3	"la plataforma cumple. Con los objetivos para lo cual está obviamente diseñada. Y es amigable." "ese factor juegos es ese gusto extra al final lo lo beneficia porque el aprendizaje que pasa a ser más significativo y sí están participando de una forma mucho más activa en su proceso de aprendizaje."

Quizziz implications	Students' technological literacy	2	<p>“Otras variables como el conocimiento de cada niño sobre esa herramienta tecnológica”</p> <p>“tenga bastante en cuenta el nivel de conocimiento que tengan los estudiantes sobre el uso de estas tics”</p>
	External factors	3	<p>“Cuando son muchos estudiantes al mismo tiempo y si hay más cursos que también están utilizando la red se suele ser más lenta”</p> <p>“las desventajas más que nada se deben como factores externos como habíamos dicho, referente a temas de conexión o cosas así”</p>

4.3.1 Prior knowledge of the area

The first theme derived into two sub-themes: **Colleagues' experiences** and **similar platform experiences**. Regarding the first sub-theme, the teacher mentioned one time that he heard about this app from a colleague during a workshop. The interview extract that illustrates subtheme **Colleagues' experiences** is:

“Simplemente antes de la intervención tenía conocimiento de esta forma y de este tipo de, de enviar tareas que se pueden enviar de forma remota porque una colega el año pasado en el colegio eh la utilizaba y a fin de año, en los consejos de evaluación, tuvimos como un mini taller donde colegas que experimentaban con otros tipos de evoluciones o de dinámica, utilizando tics trazar sus clases. Entonces yo la conocí, por eso había escuchado hablar de ella. No sabía muy bien cómo funciona. El año pasado, como como os dije, me enteré de más en detalle de cómo era el sistema.” (FRP).

Finally, for the second sub-theme, the teacher claimed two times that he had used Kahoot!, which is a platform very similar to Quizziz. The interview extracts that illustrate subtheme similar platform experiences are:

“Ya así, más concretamente Quizziz no. He utilizado algo similar y que estoy seguro es que cabe dentro de la misma categoría. Pues me podrás corregir, era los kahoot.” (FRP).

“Sí los kahoot la había utilizado en otros colegios sí anteriores en este se dificulta un poco.” (FRP).

4.3.2 Quizizz app contributions

The second theme derived into two sub-themes: **Good use of technology** and **platform features**. Concerning the first sub-theme, the teacher mentioned two times that the app allows him to give students’ cellphones a good and pedagogical use. The interview extracts that illustrate subtheme **Good use of technology** are:

“Sí en general encuentro que son prácticas muy buenas, que también han ayudado a involucrar todo este tema de la tecnología que sobre todo hoy en día los niños pasan demasiado tiempo, saben más que uno incluso.” (FRP).

“... Pero en casos como estos es provechoso ya que ellos tienen un mayor dominio. Uno puede explotarlo para fines pedagógicos como este en este caso.” (FRP).

Finally, regarding the second sub-theme, he mentioned 3 times that this platform has got important features, which make it useful for both him and his students. The interview extracts that illustrate subtheme **platform features** are:

“... Pero a modo general sí, la encuentro muy buena dinámica, amena y para, por ejemplo, para finalizar una clase para hacer el cierre o para incluso enviar un pequeño cuestionario a casa está muy buena.” (FRP).

“... Cómo está el tema del tiempo, por ejemplo. Eh y de los puntajes uno innatamente siempre trata de hacer algo competitivo, entonces eh a la vez que los niños van intentando responder con mayor rapidez, tanto para poder demostrar su conocimiento, pero también está su gustito de que está en tiempo real.” (FRP).

4.3.3 Quizizz implications

The third theme derived into two sub-themes: **Students’ technological literacy** and **external factors**. When it comes to the first sub-theme, the teacher mentioned two times that to carry out these kinds of activities, students need to have some basic knowledge on how to use their devices. The interview extracts that illustrate subtheme **Students’ technological literacy** are:

“Así que la encuentro bastante buena. Sí, habría que tener cuidado con otra, otras variables como el conocimiento de cada niño sobre esa herramienta tecnológica...” (FRP).

“Sí, sí, se lo recomendaría. Solamente con la pequeña, el pequeño alcance que tenga bastante en cuenta como está el nivel de conocimiento que tengan los estudiantes sobre él, el uso de estas ticks, la tecnología.” (FRP).

Finally, regarding the second sub-theme, the teacher claimed three times that from his experience, internet connection and hardware are usually aspects to keep in mind to avoid problems when doing these activities. The interview extracts that illustrate subtheme **external factors** are:

“acá están prohibidos los teléfonos celulares, entonces eso te limita y son cursos más pequeños (edad). Está la opción de las tablets, por supuesto, pero los cursos son numerosos y a veces no alcanzan todos con tablet, a veces son mitad notebook, mitad tablet y cuando son muchos estudiantes mismo tiempo y hay más cursos que también están utilizando la red se suele caer. También a veces los computadores, la tablets está muy lentos.” (FRP).

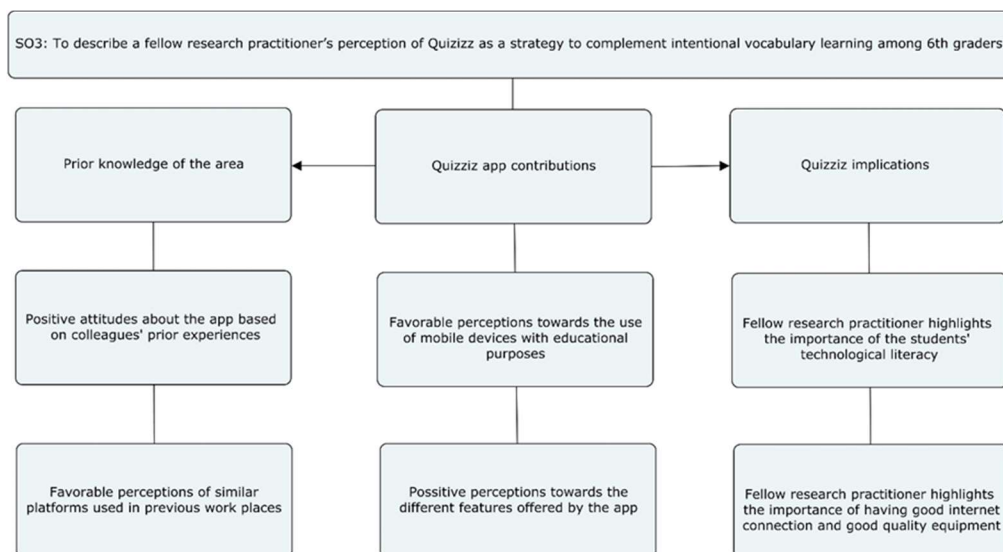
“Tiene sus ventajas y desventajas como todo. Las desventajas más que nada se deben como factores externos como habíamos hablado. Referente a temas de conexión o cosas así...” (FRP).

4.3.4 Specific objective number three summary

Figure 14 below shows a summary of the fellow research practitioner’s perceptions related to the third specific objective.

Figure 14

Fellow research practitioner’s perceptions



Based on the information displayed in figure 21, it is possible to observe that there is a pattern following positive reactions or attitudes towards the use of Quizziz as homework. As shown in the first theme, prior knowledge on the area coming from colleagues or previous experiences adds favorable perceptions towards the use of this technology. Secondly, the fellow research practitioner highlights how the different platform features promote a good use of technology in educational contexts. Finally, equally important, students' technological literacy and good equipment alongside internet connection should be kept in mind.

Chapter V: Discussion

The main goal of this chapter is to answer the research question, and to discuss the results obtained during the intervention's process and their relationship with the objectives. To do it, each specific objective will be discussed by analyzing its results alongside the scope of research in the field. This chapter also includes a section for the implications and limitations of using Quizziz as a strategy to complement intentional vocabulary learning.

5.1 Reflection on the results

SO1: To assess students' vocabulary knowledge before and after the intervention

Regarding specific objective number one, it is possible to say that there is an improvement when it comes to participants' vocabulary knowledge. This is based on the results, which shows that category 1 had a decrease of the 73%, category 2 decreased by 52%, and category three decreased by 6,45%. On the other hand, categories 4 and 5 went upward after the intervention. Category 4 increased by 46,6%, and category 5 increased by 17,02 %. At this point it is important to bring up one more time the descriptor for each category present in the vocabulary knowledge test.

Categories:

1. No recuerdo haber visto esta palabra antes.
2. He visto esta palabra antes, pero no sé qué significa.
3. He visto esta palabra antes, y creo que significa _____ (Sinónimo o traducción).
4. Conozco esta palabra. Significa _____ (Sinónimo o traducción).
5. Puedo usar esta palabra en una oración:

The decrease in the first three categories and the increase in the last two after comparing both pre and post intervention tests is a good sign, since it indicates that participants are moving from little or no knowledge about the words to knowledge involving the form, meaning and use of them. From the three aspects mentioned before, the ones that benefited the most were meaning and form, this is appreciable in participants' tests where they demonstrate more accurate answers on categories four and five. In terms of use, the answer is rather unclear. This is due to the unit plan provided by the book, where it is stated that one of the most used structures of the unit is the one used to express likes and dislikes. As a result, even though participants back up their response, the sentences provided might not represent full understanding about how to use the word. Nonetheless, I would consider their answers adequate, keeping in mind their level, context and requirements asked by the program.

These results coincide with previously mentioned research on the same topic. For example, Webb's meta-analysis (2020) where the findings indicate that intentional vocabulary-learning techniques contribute to relatively large learning gains on immediate posttests. In addition, Pellicer-Sánchez (2015) examined the two types of vocabulary learning and observed that explicit instruction made intentional learning more successful at increasing students' lexical knowledge.

Moreover, Karami and Bowles (2019) investigated intentional vocabulary learning and found that it is crucial for preparing students to learn and retain English vocabulary effectively. This is supported by (Alsaahafi, 2023), who emphasized the importance of deliberate learning of academic English vocabulary for the academic success of second language university students.

These studies collectively demonstrate the effectiveness of intentional vocabulary learning in English language acquisition. They emphasize the significance of deliberate and focused efforts in learning vocabulary, which can lead to better retention and academic success. Therefore, intentional vocabulary learning is a valuable strategy for individuals aiming to enhance their English language proficiency through vocabulary acquisition.

SO2: To describe participants' perception of Quizizz as a strategy to complement intentional vocabulary learning among 6th graders

Concerning specific objective two "to describe participants' perception of Quizizz as a strategy to complement intentional vocabulary learning." A focus group interview was carried out, and after reflecting on the results with a thematic analysis

participants' responses were classified into two bigger themes. The first theme "Quizziz app's contributions" is divided into four subthemes and the second one "Quizziz implications" is divided into two subthemes.

Theme one: Quizziz app's contributions

From theme one, the first subtheme comprehends answers related to participants and their levels of engagement with the new activity. Responses under this subtheme make clear evidence that participants had a good time when dealing with this activity. It was mentioned a considerable number of times that the activity was fun, these answers might appear as a consequence of using technology that possess gamification features during the class. The second subtheme includes all the answers in which participants stated that they felt that their vocabulary knowledge was improving. This should be related directly with the use of Quizziz, this platform has shown significant benefits when it comes to improve or foster vocabulary knowledge. According to Mustaffa and Sailin (2022), using Quizziz as a mobile self-access learning tool aided students in learning idioms and enhancing their writing abilities. This demonstrates how well Quizziz works to encourage vocabulary growth.

The second subtheme gathers participants' perceptions about their vocabulary knowledge development. Overall, it was stated that they feel like their vocabulary knowledge has improved throughout this process. This conclusion can be obtained from how students' words match their results on the pre and post intervention test, they used words like "...estamos aprendiendo a más ingles qué la forma tradicional tambien aprendimos cosas nuevas como artículos de cocina, plural, eso." (Participant 2). "Aprendimos más cosas y tenemos como más actividades que hacer..." (Participant 4). As a complement, those perceptions are followed by the results on the tests. As stated earlier these results also could be interpreted as an improvement in vocabulary knowledge. This reflection aligns with what research on the gamification says, specifically Caponetto (2014) who, following a literature review, concluded that gamification adoption is mostly driven by increasing motivation and involvement in educational activities, which makes learning more appealing, exciting, and ultimately effective. It also aligns with similar research, specifically using Quizziz and how it is a helpful tool when dealing with vocabulary. In a classroom action research study, Putra (2023) concluded that the eighth-grade students' vocabulary was improved by using Paper-Mode Quizziz, a game-based learning feature included in the platform.

The third subtheme covers participants' perceptions related to how they prefer using Quizziz over traditional activities. On this topic, participants manifested a clear preference for the use of Quizziz, this preference follows the same principles as stated earlier. The use of Quizziz boosts different aspects of the learning process to

make it more attractive and therefore, vocabulary knowledge is also benefited by this boost.

Finally, the fourth subtheme came up unexpectedly. Since students' perceptions about the use of the app were already positive oriented, they stated that they would like to use it in other subjects where they are required to do similar tasks, or where similar strategies are suitable. For example, one participant mentioned "... aparte del minijuego principal de Quizziz, hay otros más en inglés de que se puede hacer, que son de Ciencias, historia, matemáticas y todo eso." (Participant 6). Once again, this might be a result of the different gamification features included in the app. Which in many cases has a positive impact on engagement, and on this particular case motivated the students to express their desire to extrapolate this new methodology to the other subjects.

Theme two: Quizziz implications

After participating in the process of this action research, among participants' perceptions there was also room for implications. Those implications could be grouped into two subthemes, "connection issues" and "cheating during the activity".

In relation to the first subtheme, this awareness of the existence of connection issues is related to what students had to face during the intervention. Throughout the sessions in which the intervention and the app were presented many students were not able to participate properly, some unlucky ones were not even able to connect to the platform. This situation immediately attracted participants' attention and concerns, for example, they manifested on repeated occasions that the school's network was saturated and that they would need a better internet connection to work properly at school.

Lastly, concerning the second subtheme, it is relevant to mention how participants themselves mentioned that they would like to use this kind of activity in the classroom, but just like that, as an activity. They stated that they would like to keep on using this activity, yet they would not like to be evaluated in this way because the possibility to cheat or to obtain information from a different source is very accessible. They did not cheat during this intervention, but I presume that it might be because they were explained from the beginning that this activity was not graded. So, they did not go under the pressure of getting a good mark.

SO3: To describe a fellow research practitioner's perception of Quizziz as a strategy to complement intentional vocabulary learning among 6th graders

Concerning specific objective three “To describe a fellow research practitioner’s perception of Quizizz as a strategy to complement intentional vocabulary learning among 6th graders” an open-ended interview was carried out. After analyzing it through thematic analysis, three major themes emerged. Prior knowledge of the area, Quizizz app’s contributions and Quizizz implications. In this case, with each major theme, two sub themes arose.

Theme one: Prior knowledge of the area

The first subtheme focuses on how sharing experiences with colleagues can bring new techniques to our repertoire, the fellow researcher practitioner mentioned how in a particular meeting another colleague shared her experience with new apps. Among those apps, the fellow researcher stated that he could recall some information regarding Quizizz. Strongly related to what was previously stated, there is the information gathered in the second subtheme. Here the fellow researcher acknowledged the use of similar platforms, such as Kahoot! This is relevant to this research since the previous knowledge on the area could have formed a better pre-disposition to use these kinds of technologies in the classroom.

Sharing information and experiences with other teachers can significantly improve teaching practices. Hursen (2017) asserts that collaborative professional development among teachers leads to enhanced instructional strategies, increases student achievement, and improves overall school culture. In the same work, Hursen (2017) also claimed that by engaging in collaborative activities, teachers can exchange ideas, discuss challenges, and share successful practices, which can lead to a deeper understanding of pedagogical techniques and content knowledge.

Theme two: Quizizz app contributions

The first subtheme shows a clearly good attitude towards the use of Quizizz coming from the fellow researcher practitioner. He highlighted the importance of the use of strategies like this since he believes that they provide a good instance for students to use technology, specifically their mobile phones, in a way that is fruitful and advantageous for their learning. Following the same line of thought, on the second subtheme he refers to the different features provided by the Quizizz app. He argues that the platform provides what it offers, a user friendly and attractive app for both the teacher and the students. He also indirectly refers to how some gamification features included in the app act as the catching element for the students. He mentioned that “ese factor juego, es ese gusto extra al final lo, lo que beneficia porque el aprendizaje que pasa a ser más significativo y así están participando de una forma mucho más activa en su proceso de aprendizaje.” This perception aligns

with research in the field which indicates that gamification features can make the learning process more appealing and effective.

Teachers' perceptions of gamified activities in the classroom have been the subject of several studies in recent years. These studies have shed light on various aspects of how teachers perceive and utilize gamification in educational settings. For instance, Sáez Lopez et al., (2022) found that teachers generally held a positive attitude towards gamification and demonstrated good knowledge and management of gamification tools such as Genially, Kahoot, and Google Classroom. On similar work, Asiri (2019) also highlighted the significance of teachers' attitudes, perceived usefulness, and perceived social influences as predictors of their behavioral intentions to use gamification.

Theme three: Quizizz implications

Finally, the first subtheme on this area shows the importance that the peer research practitioner gives to students' technological literacy. He mentioned more than once that this is a key factor and one of the most repeated implications. All students need to know how to handle and deal with every piece of technology used during these kinds of activities. Any kind of misunderstanding or lack of knowledge could result in a failed experience for both students and teacher, for the students, it could end up in not being able to properly participate in the activity. For the teacher, it might end up in using extra class time to explain and educate students in the use of technology instead of using it for the activities prepared for the class.

The second subtheme considered all external factors, the peer research practitioner mentioned the importance of two variables: Good internet connection and adequate equipment. These two variables go side by side since the activities would not be fruitful if one of them is not present. Good internet connection is necessary since a considerable number of students are connected to the same network and the equipment should be somehow up to date to display all the elements at the right time and make the most out of the activity.

To answer the research question "What are the contributions of using Quizizz as a strategy to complement intentional vocabulary learning among 6th graders?" data gathered from pre and post intervention tests was considered, alongside the information provided by participants themselves in the focus group and peer interview. Based on the information displayed on the findings section it is possible to conclude that the app's contributions are highly oriented to favorable results.

5.2 Implications and limitations

The aim of this section is to illustrate the implications and limitations for this research as they emerged throughout it. First, even though the school had a stable internet connection, it was not able to work properly for an entire class of 44 students at the same time, even after sharing internet connection through different cell phones as hotspots. This definitely influenced the way the intervention continued its process, finally after reflecting and thinking of a possible solution. The more suitable alternative was to carry out the activity as homework. At this point what called my attention as a favorable factor was that both parents and students demonstrated a positive attitude towards the intervention regardless of the issues and participated anyway. On the other hand, this change in the procedure of the activities had a negative impact on the sample, causing a considerable number of students to miss at least 2 of the activities, therefore they did not meet the criteria to be considered in the results.

Second, concerning the results obtained during the pre and post intervention tests, the implication arose at the meaning dimension. Due to the age, level, and content covered by the unit, participants were required to learn and use a very simple structure to demonstrate their preferences. For example: “ I really like apples”, “ I hate vegetables”. Consequently, when they were required to use the words in a sentence, they appealed to the structure they learnt. Even though said answers were not wrong and considered adequate, they might not demonstrate a complete understanding of the words and their uses.

Chapter VI: Conclusion

The aim of this chapter is to emphasize on the most relevant aspects of the research, regarding the results obtained for each specific objective. Personal reflection and recommendations for further research are also displayed in this chapter.

6.1 Summary of main findings

SO1: To assess students' vocabulary knowledge before and after the intervention

Concerning this objective, one of the most important aspects to highlight is the fact that there is an improvement in participants' vocabulary knowledge. This can be seen in the results obtained throughout the pre and post intervention tests. Comparing said tests it is possible to observe how participants' answers moved from the first three categories to the last two. The mentioned first three categories

indicated uncertain knowledge to no knowledge, whereas the last two indicated certainty about their vocabulary knowledge.

In addition, regarding the three-dimensional framework. The dimensions of form and meaning were the ones that benefited the most after the intervention. In this particular case the benefits obtained for the meaning dimension could be argued. This is mainly due to the complexity of this dimension and also school regulations for the English program. Nevertheless, I would still consider their answers adequate for their level and context.

SO2: To describe participants' perception of Quizizz as a strategy to complement intentional vocabulary learning among 6th graders

When it comes to the use of this new strategy, participants showed a positive attitude. This could be concluded after using thematic analysis to explore the focus group interview in detail. The information provided by all participants was put into themes and subthemes. One of the major sub themes focused on the contributions perceived by them, which were: Vocabulary knowledge development, engagement with the new activity, preference over traditional activities and the possibility of using the app in other subjects.

The second major theme referred to the implications perceived by students during the weeks that the intervention lasted. These implications meant connectivity problems and how they would like to be just formatively assessed with this strategy, since it would be easy to cheat if the situation was a summative evaluation. It is important to mention that once the activity changed to homework, connectivity stopped being a problem.

SO3: To describe a fellow research practitioner's perception of Quizizz as a strategy to complement intentional vocabulary learning among 6th graders

Referring to the use of Quizizz, the fellow research practitioner demonstrated an explicit good perception about the use of the app. This is observable in the analysis carried out after the interview took place, his answers were classified into three major themes with their corresponding subthemes. First, the fellow research practitioner referred to his prior knowledge on the area. Regarding this topic he mentioned that thanks to a workshop at school he got to know Quizizz, so he already had a positive first impression. He also mentioned his previous experience with similar platforms. In the past, he used Kahoot! which is very similar to the features found in Quizizz. The combination of these factors indicates willingness to use these kinds of activities and technologies.

Second, the fellow research practitioner referred to the contributions he could perceive. He mentioned how using activities like this provide everyone the opportunity to use technology in a meaningful or purposeful way. In addition, he mentioned how the different features provided by the app match the expectations created. Finally, he indirectly refers to how features involving gamification are a factor that captivates participants' attention and improves engagement.

Third, the participant talked about the implications he could observe. First, he argued that it is important to consider students' technological literacy. They need to be informed about everything that is required for the activity, especially how to deal with this new app. Alongside the previous point, he referred to the external factors which might interfere in the optimal development of the activity. The external factors mentioned by the participant alluded to the quality of the equipment, meaning computers or mobile devices. The speed of the internet connection was also mentioned, since from this aspect depends on the capability of hosting larger groups of people.

6.2 Personal reflection

After conducting this intervention, several questions arise. There is plenty of room for further research regarding Quizizz and the use of technology in the classroom, especially when the activities use gamification's features. Even though research on the area indicates that there is a positive relationship between improving vocabulary knowledge and using gamified activities, most of them take place in the classroom the entire lesson. On the other hand, this research ended up having an interesting twist and thanks to the features provided by Quizizz it became an activity which participants could complete at their houses. Against all my expectations, the entire group of students and parents faced all the issues calmly and showed their willingness to participate without paying much attention to the complications. As a result, participants could experience a new kind of activity. Which based on the results, had a positive impact on participants' vocabulary knowledge, and their perceptions towards the platform were positive oriented too.

Now, on a more personal dimension, all the stages involving action research provided me with a challenging experience. From these experiences I was able to obtain relevant knowledge which hopefully will help me continue investigating and facing different daily issues in the classroom. For example, I feel that critical thinking processes have become a part of my teaching practices.

6.3 Recommendations for further research

Following action research's stages I was able to reflect on every stage throughout the intervention. As a result, I thought different recommendations which should be considered by future research on the area:

- a. Even though most schools provide a decent internet connection, a double check is needed. I would recommend a speed test for the internet connection and a monitoring class to make sure that the connection is able to hold the entire class.
- b. I would carry out a similar intervention with older participants, probably from highschool or college. This is because in higher levels students tend to use more complex sentences, which might show higher results in the "use" dimension.
- c. It is important to maintain a flexible mindset in order to face all the issues that might appear all along the process, and not to jump to conclusions. It is as important to have a functional communication channel with all the people involved during the research process.
- d. I would highly encourage and recommend to all my fellow EFL teachers to consider activities using technology and gamification features when planning a lesson. In my experience, it allows you to engage with a higher number of students and it makes some steps easier for the teacher. For example, checking answers becomes a highly automatic process.

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Appendixes

Appendix 1 Intervention Lesson Plan

General objective

To explore the contributions of using Quizizz as a strategy to complement intentional vocabulary acquisition among 6th graders.

Specific objective (SO)

SO1: To assess students' vocabulary knowledge before and after the intervention.

SO2: To describe participants' perception of Quizizz as a strategy to complement intentional vocabulary acquisition.

SO3: To describe peer's perception of Quizizz as a strategy to complement intentional vocabulary acquisition among 6th graders.

Date	Objective	Activities and Procedures	Time	Materials	Assessment	R Objectives
May 18 th	By the end of the lesson, students will demonstrate basic competences needed to work with the platform Quizizz and its different features.	<p>Introduce the learners to the App Quizizz: With the help of a slide show and a video, the app Quizizz will be presented.</p> <p>Explain Quizizz to the learners in greater detail, and demonstrate the strategy: With the same slide show, specific features and procedures within the app will be presented. Ex: how to log in, how and where to write the code, how to play.</p> <p>Practice playing the game: Spend the rest of the session practicing playing the game focusing on vocabulary from the previous unit.</p>	<p>5 min</p> <p>5 min</p> <p>20 min</p>	<p>Slides https://docs.google.com/presentation/d/13g4EQrD4grWOI8OfCxtA81zpAH9V-9zL/edit?usp=share_link&oid=107066396499905939765&rtpof=true&sd=true</p> <p>Video https://www.youtube.com/watch?v=p3d_DvBwU4E</p>	<p>Assessment instance 1: Formative assessment: Participants are able to connect and complete their first Quizizz</p> <p>Assessment instance 2: Formative assessment: information from Quizizz's results.</p>	SO1
May 23 rd	By the end of the lesson, students will be able to recall meaning from images through the use of Quizizz.	<p>Introduce the learners to the activity of the day: With the help of a slide show and a video, corresponding instructions will be presented.</p> <p>Model and practice the activity: Using the same slide show, students will be given examples of the activity and short exercises as examples to practice.</p>	<p>5 min</p> <p>5 min</p>	<p>Slides</p> <p>The slides for the 4 interventions are within the same. Check the first link.</p>	<p>Assessment instance 1: Formative assessment: Participants are able to connect and complete their second Quizizz.</p> <p>Assessment instance 2: Formative</p>	SO1

		Playing the game: Spend the rest of the session playing the game focusing on food vocabulary.	20 min		assessment: information from Quizizz's results.	
May 25 th	By the end of the lesson, students will be able to identify vocabulary in its correct form through the use of Quizizz.	<p>Introduce the learners to the activity of the day: With the help of a slide show and a video, corresponding instructions will be presented.</p> <p>Model and practice the activity: Using the same slide show, students will be given examples of the activity and short exercises as examples to practice.</p> <p>Playing the game: Spend the rest of the session playing the game focusing on food vocabulary.</p>	<p>5 min</p> <p>5 min</p> <p>20 min</p>	Slides The slides for the 4 interventions are within the same. Check the first link.	<p>Assessment instance 1: Formative assessment: Participants are able to connect and complete their third Quizizz.</p> <p>Assessment instance 2: Formative assessment: information from Quizizz's results.</p>	SO1
June 30 st	By the end of the lesson, students will be able to correctly use vocabulary in a sentence through the use of Quizizz.	<p>Introduce the learners to the activity of the day: With the help of a slide show and a video, corresponding instructions will be presented.</p> <p>Model and practice the activity: Using the same slide show, students will be given examples of the activity and short exercises as examples to practice.</p> <p>Playing the game: Spend the rest of the session playing the game focusing on food vocabulary.</p>	<p>5 min</p> <p>5 min</p> <p>20 min</p>	Slides The slides for the 4 interventions are within the same. Check the first link.	<p>Assessment instance 1: Formative assessment: Participants are able to connect and complete their fourth Quizizz.</p> <p>Assessment instance 2: Formative assessment: information from Quizizz's results.</p>	SO1
June 1 st	By the end of the lesson, students will be able to demonstrate vocabulary acquisition by dealing with vocabulary in its 3 dimensions: meaning, form and use through the use of Quizizz.	<p>Introduce the learners to the activity of the day: With the help of a slide show and a video, corresponding instructions will be presented.</p> <p>Model and practice the activity: Using the same slide show, students will be given examples of the activity and short exercises as examples to practice.</p> <p>Playing the game: Spend the rest of the session playing the game focusing on food vocabulary.</p>	<p>5 min</p> <p>5 min</p> <p>20 min</p>	Slides The slides for the 4 interventions are within the same. Check the first link.	<p>Assessment instance 1: Formative assessment: Participants are able to connect and complete their fifth Quizizz.</p> <p>Assessment instance 2: Formative assessment: information from Quizizz's results.</p>	SO1

Appendix 2 Vocabulary knowledge test.

Nombre:

Curso:

Fecha:

INSTRUCCIONES: Dispondrá de 45 minutos para responder este test. Lea cuidadosamente cada categoría que refleja su nivel de conocimiento de una palabra, que previamente serán explicadas por los profesores. En caso de tener alguna duda, por favor levante su mano y un profesor se acercará a su puesto para ayudarle.

Categorías:

1. No recuerdo haber visto esta palabra antes.
2. He visto esta palabra antes, pero no sé qué significa.
3. He visto esta palabra antes, y creo que significa _____ (Sinónimo o traducción).
4. Conozco esta palabra. Significa _____ (Sinónimo o traducción).
5. Puedo usar esta palabra en una oración:

- ❖ Encierre la categoría que estime conveniente en cada palabra mencionada abajo. En caso de escoger 3, 4 y/o 5, por favor conteste en la línea que aparece debajo de cada ítem. Por favor, siga los ejemplos:

Ejemplo 1:

BEE	1	2	3	4	5
-----	---	---	---	---	---

_____ ABEJA _____

Ejemplo 2:

BEE	1	2	3	4	5
-----	---	---	---	---	---

_____ 4+5, ABEJA, I LIKE TO SEE BEES _____

❖ The test begins here. Good luck:

APPLE	1	2	3	4	5
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AVOCADO	1	2	3	4	5
---------	---	---	---	---	---

BACON	1	2	3	4	5
-------	---	---	---	---	---

BLUEBERRY	1	2	3	4	5
-----------	---	---	---	---	---

BROCCOLI	1	2	3	4	5
----------	---	---	---	---	---

BUTTER	1	2	3	4	5
--------	---	---	---	---	---

BEANS	1	2	3	4	5
-------	---	---	---	---	---

CAKE	1	2	3	4	5
------	---	---	---	---	---

CARROT	1	2	3	4	5
--------	---	---	---	---	---

CHEESE	1	2	3	4	5
--------	---	---	---	---	---

CHICKEN	1	2	3	4	5
---------	---	---	---	---	---

CORN	1	2	3	4	5
------	---	---	---	---	---

EGG	1	2	3	4	5
-----	---	---	---	---	---

FISH	1	2	3	4	5
------	---	---	---	---	---

FLOUR	1	2	3	4	5
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GARLIC	1	2	3	4	5
--------	---	---	---	---	---

GRAPE	1	2	3	4	5
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HONEY	1	2	3	4	5
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LEMON	1	2	3	4	5
-------	---	---	---	---	---

LETTUCE	1	2	3	4	5
---------	---	---	---	---	---

MEAT	1	2	3	4	5
------	---	---	---	---	---

MILK	1	2	3	4	5
------	---	---	---	---	---

PEANUT	1	2	3	4	5
--------	---	---	---	---	---

PUMPKIN	1	2	3	4	5
---------	---	---	---	---	---

SAUSAGE	1	2	3	4	5
---------	---	---	---	---	---

TURKEY	1	2	3	4	5
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Appendix 3 Focus group questions:

- a) ¿Han notado alguna diferencia en la clase de inglés últimamente?
- b) ¿Qué tal les parece este cambio?
- c) ¿Les gusta utilizar nuevas tecnologías para realizar las tareas en casa?
- d) ¿Qué opinan sobre la app Quizizz?
- e) ¿Les gustaría hacer más actividades como estas? ¿Por qué?

Appendix 4 Peer interview questions:

- a) ¿Qué sabes sobre el uso de este tipo de tecnología para asignar tareas para realizar en casa?
- b) ¿Has usado este tipo de tecnologías con alguno de tus cursos?
- c) ¿Te gusta este tipo de tecnologías como herramienta de enseñanza?
- d) ¿Qué opinas sobre Quizizz?
- e) ¿Le recomendarías Quizizz a otro colega?